

What is claimed is:

1. A method for intravertebral reduction, comprising:  
accessing a vertebral body;  
forming an access passage into the vertebral body;  
delivering an expandable device through the passage into the vertebral body in an unexpanded condition;  
expanding the expandable device in the vertebral body with an expandable element;  
removing the expandable element; and  
placing bone filler material within the expanded expandable device.
2. The method of claim 1, wherein accessing the vertebral body includes accessing the vertebral body through at least one pedicle of the vertebra.
3. The method of claim 1, wherein accessing the vertebral body includes accessing the vertebral body from a lateral approach.
4. The method of claim 1, wherein forming the access passage includes forming the access passage into the vertebral body from a location anterior of posterior vertebral elements of the vertebral body.
5. The method of claim 1, wherein forming the access passage includes drilling a hole into the cancellous bony tissue of the vertebral body.
6. The method of claim 1, further comprising mounting the expandable device on a distal portion of a delivery instrument.
7. The method of claim 6, wherein the distal portion includes the expandable member, and mounting the expandable device includes mounting the expandable device on the expandable element before delivering the expandable device through the passage.
8. The method of claim 1, wherein expanding the expandable device includes inflating the expandable element.

9. The method of claim 8, further comprising deflating the expandable element before removing the expandable element.
10. The method of claim 1, wherein expanding the expandable device includes moving a first portion and a second portion of the expandable device away from one another.
11. The method of claim 10, wherein the first portion and second portion are substantially rigid.
12. The method of claim 11, wherein the first portion and the second portion include bone engaging features along outer surfaces thereof.
13. The method of claim 10, wherein first portion and second portion extend between a proximal end and a distal end of the expandable device, and when expanded the first portion and second portion provide a first height adjacent the distal end and a second height adjacent the proximal end, one of the first and second heights being greater than the other of the first and second heights.
14. The method of claim 13, further comprising orienting the greater height anteriorly in the vertebral body.
15. The method of claim 13, wherein the first and second portions are tapered between the first and second heights.
16. The method of claim 13, wherein the first and second portions include a stepped configuration between the first and second heights.
17. The method of claim 10, wherein the first portion and the second portion define a cavity therebetween, and placing bone filler material includes placing bone filler material in the cavity.
18. The method of claim 1, wherein the vertebral body includes an anterior portion having a collapsed height between opposite endplates thereof, and expanding the expandable device moves at least one of the opposite endplates away from the other to

provide the anterior portion of the vertebral body with a restored height between the opposite endplates, the restored height being greater than the collapsed height.

19. A method for intravertebral reduction, comprising:
  - accessing a vertebral body;
  - forming an access passage into the vertebral body;
  - delivering an expandable device through the passage into the vertebral body in an unexpanded condition;
  - expanding the expandable device with an expandable element in the expandable device to restore a vertebral body height;
  - removing the expandable element; and
  - maintaining the restored vertebral height device with the expanded expandable device.
20. The method of claim 19, further comprising placing bone filler material in the expanded expandable device.
21. The method of claim 19, wherein expanding the expandable device includes positioning the expanding element in a cavity of the expandable device and expanding the expandable element in the cavity.
22. The method of claim 21, wherein the expandable element comprises a distal portion of an instrument to deliver the expandable device.
23. The method of claim 22, wherein the expandable element includes an interior inflatable with fluid.
24. The method of claim 19, wherein expanding the expandable device includes expanding the expandable device uni-directionally.
25. The method of claim 19, wherein expanding the expandable device includes expanding the expandable device radially.

26. The method of claim 19, wherein accessing the vertebral body includes accessing the vertebral body through at least one pedicle of the vertebra.
27. The method of claim 19, wherein accessing the vertebral body includes accessing the vertebral body from a lateral approach.
28. The method of claim 19, wherein expanding the expandable device includes moving a first portion and a second portion of the expandable device away from one another.
29. The method of claim 28, wherein the first portion and second portion are substantially rigid.
30. The method of claim 28, wherein first portion and second portion each extend between a proximal end and a distal end of the expandable device, and when expanded the first portion and second portion are separated by a first height adjacent the distal end and a second height adjacent the proximal end, one of the first and second heights being greater than the other of the first and second heights.
31. The method of claim 30, further comprising orienting the end with the greater height anteriorly in the vertebra.
32. The method of claim 19, wherein the vertebral body includes an anterior portion having a collapsed height between opposite endplates thereof, and expanding the expandable device moves at least one of the opposite endplates away from the other to provide the anterior portion of the vertebral body with a restored height between the opposite endplates, the restored height being greater than the collapsed height.
33. The method of claim 19, wherein forming the access passage includes forming the access passage through a pedicle of the vertebral body.
34. The method of claim 33, wherein in the unexpanded condition the expandable device includes a banana shape, and delivering the expandable device includes

positioning the expandable device through the access passage and orienting a convexly curved anterior wall of the expandable device anteriorly in the vertebra.

35. The method of claim 33, further comprising:

forming a second access passage into the vertebral body through a second pedicle;  
delivering a second expandable device through the passage into the vertebral body in an unexpanded condition and adjacent the expandable device; and

expanding the second expandable device with an expandable element in the expandable device to restore a vertebral body height.

36. The method of claim 19, wherein the expandable device includes a width which remains substantially constant in the unexpanded and expanded conditions.

37. A system for intravertebral reduction, comprising:

a delivery instrument including an expandable element along a distal portion thereof; and

an expandable device including a cavity, the expandable device being removably mountable to the expandable element with the expandable element in the cavity and each of the expandable device and the expandable element in an unexpanded condition, wherein the expandable device is deliverable to an intravertebral space in the unexpanded condition and thereafter expandable with expansion of the expandable element to compress cancellous bone in the intravertebral space.

38. The system of claim 37, wherein the expandable element includes a balloon structure with an interior for receiving an expansion fluid.

39. The system of claim 38, wherein the expansion fluid is selectable from the group consisting of: saline solution, compressed air, and radio-contrast fluid.

40. The system of claim 38, wherein the delivery instrument includes a shaft defining a lumen in fluid communication with the interior of the expandable element.

41. The system of claim 37, wherein the expandable device includes a first portion and a second portion extending therealong, the first and second portions being movable away from one another upon expansion of the expandable element.
42. The system of claim 41, wherein the first and second portions each define an outer surface with bone engagement members therealong.
43. The system of claim 41, wherein the first and second portions are uni-directionally movable away from one another upon expansion of the expandable element.
44. The system of claim 41, wherein in an expanded configuration the first and second portions include outer surfaces adjacent distal ends thereof separated by a first height and outer surfaces adjacent proximal ends thereof separated by a second height, one of the first and second heights being greater than the other of the first and second heights.
45. The system of claim 44, wherein the expandable device is tapered between the first and second heights.
46. The system of claim 44, wherein the expandable device includes a stepped configuration between the first and second heights.
47. The system of claim 41, wherein the first and second portions include bone growth openings therethrough.
48. The system of claim 41, wherein the first and second portions are substantially rigid and the expandable element is non-rigid.
49. The system of claim 41, wherein the first and second portions are structured to maintain an expanded configuration after removal of the expandable element from the cavity therebetween.
50. The system of claim 41, further comprising bone filler material positionable in the cavity between the first and second portions.

51. The system of claim 50, wherein the bone filler material includes bone growth promoting material.
52. The system of claim 37, wherein the cavity opens at a distal and at a proximal end of the expandable device.
53. The system of claim 37, wherein in the unexpanded condition the expandable device includes a banana shape with a convexly curved anterior wall and a concavely curved posterior wall.
54. The system of claim 53, wherein when expanded the expandable device includes a D shape with the anterior wall convexly curved and the posterior wall linear.
55. A system for intravertebral reduction, comprising:  
a delivery instrument including a non-rigid expandable element along a distal portion thereof; and  
an expandable device including a cavity between substantially rigid first and second portions, the expandable device being structure for positioning in an intravertebral space, wherein the expandable element is expandable in the cavity to move the first and second portions away from one another and compress cancellous bone in the intravertebral space.
56. The system of claim 55, wherein the first and second portions each define an outer surface with bone engagement members therealong.
57. The system of claim 55, wherein the first and second portions remain movably engaged with one another during expansion of the expandable element.
58. The system of claim 55, wherein in an expanded configuration the first and second portions include outer surfaces adjacent distal ends thereof separated by a first height and outer surfaces adjacent proximal ends thereof separated by a second height, one of the first and second heights being greater than the other of the first and second heights.

59. The system of claim 58, wherein the expandable device is tapered between the first and second heights.

60. The system of claim 58, wherein the expandable device includes a stepped configuration between the first and second heights.

61. The system of claim 55, wherein the first and second portions include bone growth openings therethrough.

62. The system of claim 55, wherein the first and second portions are structured to maintain an expanded configuration after removal of the expandable element from the cavity therebetween.

63. The system of claim 55, further comprising bone filler material positionable in the cavity between the first and second portions.

64. The system of claim 55, wherein the expandable device is radially expandable.

65. The system of claim 55, wherein the expandable device includes a width between opposite sides thereof, the width remaining substantially constant in the unexpanded and expanded conditions.

66. The system of claim 65, wherein in the unexpanded condition the expandable device includes a banana shape with a convexly curved anterior wall and a concavely curved posterior wall.

67. The system of claim 66, wherein when expanded the expandable device includes a D shape with the anterior wall convexly curved and the posterior wall linear.